



**Asia-Pacific  
Economic Cooperation**

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**2019/SOM3/EPWG/002**

Agenda Item: 5

## **Summary of the Meeting – 14<sup>th</sup> Emergency Preparedness Working Group Meeting**

Purpose: Information  
Submitted by: APEC Secretariat



**15<sup>th</sup> Emergency Preparedness Working Group  
Meeting  
Puerto Varas, Chile  
22 August 2019**

**Summary of the Meeting**  
**14<sup>th</sup> Emergency Preparedness Working Group Meeting**  
**Port Moresby, Papua New Guinea**  
**10 – 11 August 2018**

1. The **14<sup>th</sup> Emergency Preparedness Working Group** (EPWG) Meeting was held in International Convention Center, Port Moresby, Papua New Guinea on 10 –11 August 2018. The meeting was chaired by Dr. Li Wei-Sen (Chinese Taipei) as EPWG Co-Chair and opened by Mr Ruel Yamuna, Managing Director Climate Change and Development Authority, and Mr Martin Mose, National Disaster Center of Papua New Guinea. The meeting was also attended by HWG Chair and LSIF Representative. The APEC Secretariat’s Program Director Ms Kartika Handaruningrum assisted the meeting.
2. The two day meeting was attended by 11 out of 21 APEC Economies namely: Australia; Chile; China; Indonesia; Japan; Republic of Korea; Papua New Guinea; the Russian Federation, Chinese Taipei; the United States; and Viet Nam.

**Agenda Item 1: Welcome Remarks by Host Economy**

3. Mr Ruel Yamuna, Managing Director Climate Change and Development Authority Papua New Guinea welcomed Delegates to Port Moresby and highlighted that natural disaster is one of the major challenges in the region. Nothing that APEC member economies experienced 70% of all disasters globally, which counted hundreds of billion USD lost annually. He further expressed his heartfelt condolences on behalf of the Government of Papua New Guinea to victims and family affected by the 6.9 earthquake in Lombok. He also mentioned that after 13<sup>th</sup> EPWG met last February, Papua New Guinea also stroked by 7.1 magnitude earthquake and several other economies experienced destructive natural disasters. In this connection, EPWG works are more relevant to build our resiliency towards natural calamities.
4. Mr Martin Mose Director Papua New Guinea National Disaster Center (NDC) also welcomed Delegates and briefly reported on the earthquake stroked Highland area of Papua New Guinea last February, the damages, as well as measures taken to response to the disaster. He also conveyed his condolences to the people of Indonesia over the earthquake in Lombok, which this is a reminder of a constant disaster occurring in the region.

**Agenda Item 2: Opening Remarks by Co-chairs**

5. Prior to deliver his opening remarks, Dr. Wei-Sen Li, the Co-Chair EPWG requested delegates to observe a moment of silent for the causalities from the Lombok earthquake.
6. Representative of Indonesia thanked the Chair and the Delegates for the condolences. She further reported on the latest situation in Lombok and on the concerted efforts taken by all stakeholders to response to the disaster, as well as to restore the situation.

**Agenda Item 3: Adoption of the Annotated Agenda of the 14<sup>th</sup> EPWG Meeting**

7. The meeting adopted the Annotated Agenda (2018/SOM3/EPWG/001)

**Agenda Item 4: 13<sup>th</sup> EPWG Meeting Summary Report**

8. The 13<sup>th</sup> EPWG Summary of the Meeting formally endorsed by the meeting (2018/SOM3/EPWG/002).

**Agenda Item 5: Quick review on recent natural disasters in APEC member economies**

9. The Co-Chair presented a quick review on recent disasters happening in APEC member economies in order to give background information for follow-up discussions. There were many types of natural disasters happening simultaneously among others geological events such as earthquakes, landslides and volcanic eruptions; hydro-meteorological events such as typhoons; climatic event such as droughts and other type of disaster such as wild fires. The disasters gave direct impacts such as losses of lives and properties, operations of business, tourist safety as well as social-economic loses. He further reminded that all severe natural disasters mostly happened in APEC region, in that connection, he reminded once again the importance of implementing APEC Disasters Reduction Risk Framework adopted by the Leaders in 2015. (2018/SOM3/EPWG/010)

**Agenda Item 6: Preparation for 12<sup>th</sup> SDMOF**

10. The Representative of Papua New Guinea updated on the preparation for 12<sup>th</sup> SDMOF, Papua New Guinea. The 12<sup>th</sup> SDMOF will be held on 25-26 October 2018 with the theme of “Advancing the Multi-Hazard Early Warning System for Emergency Preparedness and Disaster Risk Management”. The Forum will have four sessions, which will cover collection and research of data, communicating and delivering the warning message, as well as localizing warning. The outcome of the meeting should be a summary and policy recommendation related on the theme. (2018/SOM3/EPWG/003)

**Agenda Item 7: Sharing by APEC LSIF (Life Science Innovation Forum) and APEC Health Working Group (HWG)**

11. The Health Working Group (HWG) Chair shared the works done by HWG, its mandate, as well as emergency preparedness agenda in the HWG, such as Healthy Asia Pacific 2020 Initiative and Health Working Group Strategic Plan 2016 – 2020. The Healthy Asia Pacific 2020 approved at the fourth High Level Meeting in Beijing in August 2014 and one of the four key areas is on improving health emergency preparedness, surveillance, response and recovery systems for public health emergencies including pandemic events and natural disasters. While in the Health Working Group Strategic Plan, one of its objective is on enhancing preparedness and response to public health emergencies and disasters, including prevention and control emerging and re-emerging infectious diseases. (2018/SOM3/EPWG/016)

12. The Life Sciences Innovation Forum (LSIF) Representative on behalf of the LSIF Chair presented on the work of LSIF which to shape policies that will contribute to the development of the medical life sciences sector and ultimately the improvement of public health in the APEC region. LSIF has focused on three areas namely research and development, regulatory harmonization, and health policy and innovation. He emphasized that private sector engagement is key to LSIF success and highlighted areas of mutual interest such as APEC Mental Health Digital Hub, Health Security Financing, innovative collaborations for influenza prevention and treatment, as well as anti-microbial resistance. **2018/SOM3/EPWG/013**

**Agenda Item 8: Progress Report on EPWG's Project Implementation and report on new concept note**

13. On behalf of the Project Overseer of EPWG 01 2016A: Enhancing Rural Disaster Resilience through Effective Infrastructure Investment, the APEC Secretariat Program Director reported that the APEC Casebook of Infrastructure Build Back Better from Natural Disasters has been completed and published. The Executive Summary of the Casebook was distributed as part of the meeting document. PO will send the hardcopy of the Casebook to EPWG focal point and to Singapore Library. **2018/SOM3/EPWG/014**
14. The Representative from Japan updated on EPWG 02 2017A: Identifying Economic Impacts by Mega Disasters Affecting Asia Pacific Economies and stated that the workshop initially planned to be held in Autumn 2018 will be rescheduled to another date in 2019 to ensure deliverable and more useful outcome in line with host economy priorities. Japan will inform any detail later through the Secretariat.
15. The EPWG Co-chair on behalf of Chinese Taipei updated on EPWG 03 2017A: Capacity Building and Emergency Preparedness for Sustainable Development at Agricultural Communities through "Plant Back Better" (PBB). Since this project has been approved, the team has conducted four video conference with key partners and held one meeting in Viet Nam to explore the possibility to implement the pilot project. The project planned to select one vulnerable community to assist them with planting disaster resilient vegetable. The project seek collaboration with World Vegetable Center to provide knowledge and skill about how to plan vegetable safer and help the farmer to improve their economic income. This project will also use ICT Technology to plan their vegetable and to foster collaboration with local MSMEs.
16. The Representative of Chile presented the concept note on "Public-Private Collaboration for the Development of Strategies for Adaptation to Climate Change and Reducing the Risk of Disasters in Port Facilities" co-sponsor by Japan, Malaysia, and Papua New Guinea. The project aimed to strengthen Supply Chain Connectivity Framework and the Committee and Investment Objectives. The action under this project would also contribute towards the fulfillment of COP 21 and the Sendai Framework Objectives. The project is directed to this group which to build capacity of the APEC Region so that member economies could mitigate, prepare and response better to the climate change effect. There will be three-day workshop organize under

this project during the 2019 APEC Chile year. Member economies will seek to advance upon private, academic, and government partnerships on effective climate change adaptation actions within maritime and port infrastructure and the global supply chain associated, responding with mitigation measures for reducing impacts of hazards.

17. The Representative of Chile also presented a Non-Paper on Strengthening APEC Cooperation on Disaster Risk Reduction: Adoption of a Standardize Methodology for assessing risk drivers at the local level. He elaborated that with major disasters experiencing by Chile from 1960 to today, the lessons that Chile has learned is that disasters are not natural, and there are some measures to reduce the risk of disasters. Chile started to challenge the concept of natural disasters, and Chile took a lot of global assessment risk started in 2009. Further Chile summed up that the problem is not the natural disasters as they are a constant event; however, the problems because there are so many vulnerabilities in the communities. The first step to reduce the vulnerabilities is to identify what is the vulnerability in the society started from local level, by using a survey to assess local risk drivers. The survey has four dimensions, namely Governance, Climate Change, Territorial Planning, and Socio-Demographic-Economic Dimension, with 10 risk drivers and 41 variables. In that connection, the Representative of Chile suggested that at the upcoming meeting in Chile, APEC member economies could start to discuss these methods and adopted as APEC methodology. China, China Taipei and the United States of America representatives expressed interest in the methodology, **2018/SOM3/EPWG/004 and 2018/SOM3/EPWG/017**

#### **Agenda Item 9: Report on EPWG Intersessional Work**

18. The Co-Chair reported some collaborative efforts between EPWG with other APEC Fora, namely with CTWG on the Workshop on the Protection of Soft Target in the context of counterterrorism, where EPWG helped to identify vulnerability of the critical infrastructure. Another workshop related to EPWG was an SMEWG Workshop on Digital Resilience, which related to Business Continuity Plan (BCP).
19. The Representative from Russian Federation reported on activities under Telecommunication Working Group (TelWG) namely Workshop on Earthquakes and Waterfloods Monitoring System with the application of the Internet of Things (IoT) to be held in Chinese Taipei in October 2018. The aim is to increase the predictive potential of existing global and national monitoring systems for earthquakes and waterfloods using the advancement of ICTs. The workshop will have four tracks namely: (i) increasing the potential of existing earthquakes, waterfloods and other natural and man-made disaster monitoring systems, (ii) existing indicators: global space-time and navigational systems (GPS, GLONASS etc.), global and domestic weather monitoring systems, (iii) possible solutions. IoT indicators, mathematical processing of monitoring data, ICT-based remote monitoring hardware, and (iv) way forward. APEC economies cooperation to further increase the potential of disaster monitoring system. Further, he elaborated on the agenda and administrative arrangement of the workshop. **2018/SOM3/EPWG/018**

**Agenda Item 10: Recent major Disasters and discussions (reporting time might extend to the second agenda)**

20. The Representative of Australia presented on storm and floods and the evolution of disaster risk reduction in Australia. She mentioned that according a recent report estimated that a total cost of natural disasters in Australia to be 6.3 billion dollars per year. Storm and flooding account for over half of insurance losses in Australia. Between 1967 and 2013, the average direct annual cost of flooding alone had been estimated at 943 million AUD. Resilience to the impact to this particular disaster is critical to ensure that disaster risk reduction in Australia is successful. The implementation of the Sendai Framework allows Australia an opportunity to approach disaster risk reduction from the perspective of Australia. Further, she elaborated on the most costly flood in Australia in 2011 in Lockyer Valley. She also reiterated Australia support to the Sendai Framework and recognized the impact to the new normal. She further reiterated Australia's commitment to the implementation of APEC Disaster Risk Reduction Framework. **2018/SOM3/EPWG/005**
21. The Representative of China reported on the floods in 2018 and the relief measures taken. Since the beginning of 2018, natural disasters happened in China were mainly typhoon, floods, landslide and mudslide. By July 21, almost 40 million people were affected because of the typhoon and floods, 269 people died, and 32 people reported missing with almost 32.000 houses collapsed, and huge economic losses as well as hundreds of hectare of crops were failed to harvest. She further elaborated on the measures taken to relief the situations.
22. The Representative from the Republic of Korea reported on Korea's flood management policy and response systems, the case study on typhoon Prapiroon, and future direction for improvements. He first elaborated on natural disaster management policy in Korea starting from mitigation where activities were targeted to reduce and prevent disaster risks, followed by preparedness where activities were targeted to prepare action needed to be taken in case of disaster. Then he mentioned on recovery phase where activities were targeted to recover from damages and restore to pre-disaster status, and finally response where activities were targeted to respond to disasters including emergency relief. He further elaborated each of the phase in which these activities were cyclically related, followed by the implementation of those policy during the Typhoon Prapiroon. He also emphasized the importance of taking domestic anticipatory measures by updating laws and regulations such as adjusting the current disaster prevention area to reflect climate change, as well as enhancing international collaboration in disaster safety efforts. **2018/SOM3/EPWG/006**
23. The Representative of Chinese Taipei reported on Typhoon Maria in July 2018 and measures taken. He mentioned that the process was taken in three phases; firstly, as the typhoon was approaching, the first report was issued on July 9, 2018 to identify disaster hotspots by impact assessment. Secondly, when the typhoon made a landfall, a report was issued on July 20, 2018 to highlight focal issues like high tides, floods and landslides. Thirdly, when the typhoon was about to leave, a report was issued on July 11, 2018 to picture out the situations. **2018/SOM3/EPWG/011**

24. The Representative of Viet Nam reported briefly on Viet Nam's disaster measures since 2017 because there were many disasters happened in Viet Nam. There were 16 typhoon and six tropical cyclone as well as strong storm occurred in Viet Nam. She also conveyed appreciation to Republic of Korea and ASEAN Humanitarian Center for the assistance given to Viet Nam.
25. The Representative of Papua New Guinea reported on Tari Earthquake happened in February 2018. He first gave an overview that Tari Earthquake was a major earthquake since the 7.6 magnitude earthquake in September 2002 and the earthquake occurred in the area where such event had not been experienced for a long time. From historical record, earthquake of similar magnitude had previously occurred within the area in 1922. He then elaborated on the extent of damage in areas and population affected, the impact including on public infrastructure, properties, lifelines, as well as immediate need, and immediate response actions taken. **2018/SOM3/EPWG/007**
26. The Representative of Indonesia gave update on the Lombok Earthquake, which hit Lombok on 5 August 2018. She mentioned that a seven Magnitude earthquake hit Lombok on that date, and as of 8 August, there were 381 aftershock. She further elaborated on the concerted measures immediately taken by many stakeholders in Indonesia such as Local and Central Government of Indonesia as well as Local Non-Governmental Organization. Those measures, in particular evacuation including evacuating the tourists, as Lombok is a tourist destination by the search and rescue team and measures to restore the situation.
27. The Representative of the United States presented an update on volcano eruption in Kilauea Summit and East Rift Zone in July 2018. He first gave an overview on Hawaii Island and Kilauea is the youngest and most active. All of the eruptive activity is originating from Kilauea, the youngest of five volcanoes that comprise the Island of Hawai'i in ongoing eruption for 35 year. Most of the eruptive activity of the past three months has taken place from new fissure vents that opened in the Lower East Rift Zone of Kilauea. He also elaborated on current volcanic hazards from Kilauea eruptions. He further informed on USGS Responses, among others by working closely with Hawai'i County Civil Defense, Hawai'i State Emergency Management, the National Park Service, FEMA and others to prepare for continued outbreak of lava threatening people and developed areas. USGS has also 24/7 presence in the lava flow areas where USGS geologists and a USGS-OAS Unmanned Aircraft System Team track fissure activity and the advancement of lava flows. Lastly, he updated on the status at Kilauea's summit as of August 6, 2018. **2018/SOM3/EPWG/015**
28. The Representative of Papua New Guinea updated on Kadowar eruption, transition from response to recovery and resettlement. He first reported on the current situation and care center under Wewak District. He also elaborated on policy related matters for resettlement of IDPs, road linkages, water supply, hygiene, and sanitation situation in the resettlement, health systems, education and food security. He also informed on the challenges faced by PNG in particular related to funding constraints for land acquisition, policy related matters for the establishment of a resettlement authority, bad weather

and rough seas places constraints for basic need supply, as well as vulnerability to water borne diseases. **2018/SOM3/EPWG/008**

29. The Chair presented on ways to implement disaster-resilient development. He first mentioned on the elements to succeed in promoting DRR such as scientific prediction to provide forecasting based on scientific models; real-time monitoring to provide updated data based on gauges; and in time decision to provide reaction based on well-defined plan. He also stated on evolutionary process to bring resilience as well as collective involvement among stakeholders. He then elaborated on life cycle to enhance resilience from science and technology, understanding knowledge, people's mindset, and take actions. **2018/SOM3/EPWG/019**
30. Representative of Chile thanked the Chair for the presentation and agreed that there is a need to broaden up the discussion and the scope of the EPWG and this would relate to the future of the group. He suggested to consider discussing sustainable development not only based on emergencies but in a broader context such as climate change, as most economies have direct impact from it. In his opinion, this was the most proper time to move forward and to start considering that the EPWG may require a new approach.
31. The Representative of Papua New Guinea also thanked the Co-Chair and supported the Representative of Chile to broaden up the scope of EPWG as it is timely.
32. The Representative of the United States was of the view that the strength of EPWG was when the group could add value not only within the APEC context as well as with the global context. She then recalled the adoption of APEC Disaster Risk Reduction Framework in 2015 where, the group spent a lot of time discussing about where the EPWG could add value and avoid duplicating efforts taken by other fora. Finding ways to strengthen cross-fora collaboration should be one of the way for this group to consider.

#### **Agenda Item 11: Enhancing disaster management in APEC**

33. The Representative of China reported on the new framework of emergency management in China. He first informed that as of 6 August 2018, 87 million people had been affected by natural disasters, 417 people were missing or died, 2.35 million people were relocated, 51,000 houses collapsed, 117,000 houses were seriously damaged, 934,000 houses were generally damaged, and the direct economic loss was RMB 156.6 billion. However, according to the statistic, the losses caused by natural disasters this year were significantly less than the average of the same period of the past five years. Among them, the number of death and missing, the number of relocated people, collapsed houses and the direct economic loss reduced by 63 %, 54%, 85%, 45%. He further elaborated on the reform of China's Emergency Management Agencies. Chinese President Xi Jinping has repeatedly given important instructions on disaster prevention, mitigation, relief and work safety. On March 17 2018, the National People's Congress decided to establish the Ministry of Emergency Management as an important component under Department of the central government. He further



reaffirmed China's commitment in among others in the implementation of Sendai Framework and the commitment to strengthen the exchange and sharing of disaster information. **2018/SOM3/EPWG/021**

#### **Agenda Item 12: APEC Cross-Fora Report and Outreaching Collaborations**

34. The Co-Chair on behalf of Integrated Research on Disaster Risk (IRDR) made a presentation on IRDR activities. He first informed on IRDR objectives which among other to characterize hazard, vulnerability and risk; to made effective decision-making in complex and changing risk context, as well as to reduce risk and curb losses through knowledge-based actions. The mission was to develop trans-disciplinary multi sectoral alliance for in-depth practical disaster risk reduction research studies and for the implementation of effective evidence-based disaster risk policies and practices. He also informed on the structure of IRDR, its working group, its training programs, and flagship projects. **2018/SOM3/EPWG/020**
35. The officer from Manila Observatory sent a video presentation and made a presentation on the work of the Manila Observatory in the disaster risk reduction area in the Philippines. The Manila Observatory is a scientific research institution with research work in the fields of atmospheric and earth science. It advocates a science-based approach to sustainable development and poverty reduction through its principal focus on the areas of climate change and disaster science. She further explained about the project and programs currently undertaken by Manila Observatory.

#### **Agenda Item 13: Report of the Secretariat**

36. The Program Director from APEC Secretariat presented an update on the project management process in particular with regard to the result of Project Session 1 and 2 – 2018, as well as how to apply APEC fund for project. She also informed that for Project Session 2 – 2018, EPWG submitted one Concept Note titled “Public-Private Collaboration for the Development of Strategies for Adaptation to Climate Change and Reducing the Risk of Disasters in Port Facilities”, which currently is awaiting for BMC approval. **2018/SOM3/EPWG/012**

#### **Agenda Item 14: Documentation Classification List**

37. The APEC Secretariat with Delegates reviewed the document classification list and the meeting endorsed the Document Classification List. **2018/SOM3/EPWG/000**

#### **Agenda Item 15: Other Business**

38. The Representative of Papua New Guinea reported that the EPWG did not meet quorum again for this meeting, and perhaps the group needed to bring the attention of SCE to raise the participation of member economies to the EPWG meeting. The Co-Chair added that this meeting was three step away from meeting the quorum since this meeting attended by only 11 economies. In this regard, the Co-Chair stated that after

the meeting, he would send a letter to the SOM Chair explaining some difficulties from disaster managers to attend the meeting as so many natural disasters happened and thus flexibility on quorum issue should be given to EPWG meeting. He will also propose if attendance by virtual for example by video conference will be counted as participation.

39. The Representative of Papua New Guinea proposed a language to submit a language for AMM Statement. She proposed a paragraph: "Promote increased disaster resiliency by sustaining and improving early warning systems through increased data exchange networks, improved forecasting skills and training, and reliable dissemination strategies". This paragraph will be circulate as part of the AMM draft for member economies input. **2018/SOM3/EPWG/009**
40. The Co-chair reminded the group that according to the EPWG ToR, the group should select a second co-chair. He invited member economies to voluntary nominate as the second co-chair and he suggested continuing the discussion intersessionally.

#### **Agenda Item 16: Closing Remarks**

41. The EPWG Co-chair closed the meeting by delivering his closing remarks. He first conveyed his sincere appreciation to Papua New Guinea for the hospitality throughout the year and excellent arrangement in hosting the EPWG meetings. He then emphasized the importance of the work undertaken by the group for future generation. He also reminded the delegates to attend the 12<sup>th</sup> Senior Disaster Management Officials Forum.